

may be a mobile phone. The link layer metric may be at least one of a physical distance, a hop count, an energy consumption value, or a radio path characteristic.

[0007] Additional example embodiments of the invention may include a computer program product. The computer program product may include at least one computer-readable storage medium bearing computer program instructions embodied therein for use with a computer. The computer program instructions may include program instructions configured to identify at least two routers accessible to a source node via a mesh network, determine one or more link layer metrics for links between the source node and each of the at least two routers, determine, using the link layer metrics, a selected router from among the at least two routers, and cause traffic to be routed from the source node to a network other than the mesh network through the selected router in response to determining the selected router from among the at least two routers. The computer program product may be further configured to determine network layer metrics for the at least two routers, determine that the link layer metrics override the network layer metrics, and use the link layer metrics to select a router from the at least two routers for routing traffic from the source node to the network other than the mesh network in response to the link layer metrics overriding the network layer metrics. The link layer metrics may serve as a tie-breaker when there is a tie among the at least two routers based on the network layer metrics. The network layer metrics may include a priority level for each router. The link layer metrics may include a number of hops between the source node and each of the at least two routers, and the selected router may be the router associated with the least number of hops. The link layer metric may be at least one of a physical distance, a hop count, an energy consumption value, or a radio path characteristic.

[0008] Example embodiments of the invention may also include an apparatus. The apparatus may include means for identifying at least two routers accessible to a source node via a mesh network, means for determining one or more link layer metrics for links between the source node and each of the at least two routers, means for determining, using the link layer metrics, a selected router from among the at least two routers, and means for causing traffic to be routed from the source node to a network other than the mesh network through the selected router in response to determining the selected router from among the at least two routers.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Having thus described certain embodiments of the invention in general terms, reference will now be made to the accompanying drawings, which are not necessarily drawn to scale, and wherein:

[0010] FIG. 1 is a block diagram of an apparatus that may be specifically configured in accordance with an example embodiment of the present invention;

[0011] FIG. 2 is a schematic diagram depicting an example of a network in accordance with an example embodiment of the present invention; and

[0012] FIG. 3 is a flow diagram illustrating an example of a method for selecting a router in an infinite link environment in accordance with an example embodiment of the present invention.

DETAILED DESCRIPTION

[0013] Some embodiments of the present invention will now be described more fully hereinafter with reference to the accompanying drawings, in which some, but not all, embodiments of the invention are shown. Indeed, various embodiments of the invention may be embodied in many different forms and should not be construed as limited to the embodiments set forth herein; rather, these embodiments are provided so that this disclosure will satisfy applicable legal requirements. Like reference numerals refer to like elements throughout. As used herein, the terms “data,” “content,” “information,” and similar terms may be used interchangeably to refer to data capable of being transmitted, received and/or stored in accordance with embodiments of the present invention. Thus, use of any such terms should not be taken to limit the spirit and scope of embodiments of the present invention.

[0014] Additionally, as used herein, the term ‘circuitry’ refers to (a) hardware-only circuit implementations (e.g., implementations in analog circuitry and/or digital circuitry); (b) combinations of circuits and computer program product (s) comprising software and/or firmware instructions stored on one or more computer readable memories that work together to cause an apparatus to perform one or more functions described herein; and (c) circuits, such as, for example, a microprocessor(s) or a portion of a microprocessor(s), that require software or firmware for operation even if the software or firmware is not physically present. This definition of ‘circuitry’ applies to all uses of this term herein, including in any claims. As a further example, as used herein, the term ‘circuitry’ also includes an implementation comprising one or more processors and/or portion(s) thereof and accompanying software and/or firmware. As another example, the term ‘circuitry’ as used herein also includes, for example, a baseband integrated circuit or applications processor integrated circuit for a mobile phone or a similar integrated circuit in a server, a cellular network device, other network device, and/or other computing device.

[0015] As defined herein, a “computer-readable storage medium,” which refers to a non-transitory physical storage medium (e.g., volatile or non-volatile memory device), can be differentiated from a “computer-readable transmission medium,” which refers to an electromagnetic signal.

[0016] A method, apparatus and computer program product are provided in accordance with an example embodiment of the present invention in order to select a router in an infinite link environment. In some aspects, the “selection” operation refers to choosing a router as a “default” route for data packets. In this regard, a method, apparatus and computer program product of an example embodiment may determine one or more link layer metrics for routers in the infinite link layer environment, such as link distance metrics to each router. The metrics may be used to select a router for accessing another network, such as the Internet.

[0017] The system of an embodiment of the present invention may include an apparatus **100** as generally described below in conjunction with FIG. 1 for performing one or more of the operations set forth by FIGS. 2-3 and also described below. In this regard, the apparatus **100** may be embodied by a mobile terminal. In this embodiment, the mobile terminal may be in communication with a display and/or a data network, either directly, such as via a wireless or wireline connection, or indirectly via one or more intermediate computing devices. In this regard, the display and the mobile terminal